



February 25, 2005

William A. Bonnet  
*Vice President*  
*Government and Community Affairs*

The Honorable Chairman and Members of  
the Hawaii Public Utilities Commission  
465 South King Street  
Kekuanaoa Building, 1st Floor  
Honolulu, Hawaii 96813

Dear Commissioners:

Subject: Docket No. 03-0371 – Proceeding to Investigate Distributed Generation in Hawaii

This responds to the February 14, 2005 letter filed by Sandra-Ann Wong on behalf of Hess Microgen LLC (“Hess”) requesting information from HECO/HELCO/MECO in the subject proceeding. At the Distributed Generation Investigation hearing on December 10, 2004, in response to a question from HECO/HELCO/MECO’s counsel, Thomas W. Williams, Esq., Hess witness Sandra-Ann Wong requested a copy of HELCO’s final statement of position with respect to its Standby Service – Rider A in HELCO’s 1999 test year rate case, Docket No. 99-0207.<sup>1</sup> Attached is HELCO’s Final Standby Service Rider Proposal and Supporting Statement, filed on January 24, 2001 in Docket No. 99-0207 (Exhibit 1). Also attached is the related settlement agreement between HELCO and the Consumer Advocate that was referenced in HELCO’s Final Standby Service Rider Proposal and Supporting Statement, also filed on January 24, 2001 (Exhibit 2). Since these two documents are already part of the public record in Docket No. 99-0207, one copy is being provided to the Commission, Consumer Advocate and the parties/participants to the subject proceeding.

Hess’ February 14, 2005 letter also requested the calculation that HECO/HELCO/MECO offered to prepare with respect to the minimum number of kilowatthours that a customer would have to purchase to recover the demand-related charges properly attributable to that customer that in the current rate design are recovered through the energy charge.<sup>2</sup> HECO/ HELCO/MECO are working on this calculation and plan to file it with the Commission, Consumer Advocate and the parties/participants to this proceeding in the near future.

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<sup>1</sup> See the Transcript of Proceedings, Volume III, taken on December 10, 2004, pages 87-88.

<sup>2</sup> See the Transcript of Proceedings, Volume III, taken on December 10, 2004, pages 76-85.

The Honorable Chairman and Members of  
the Hawaii Public Utilities Commission  
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If you have any questions on this matter, please contact Dan Brown at 543-4795.

Sincerely,



Attachments

cc: Division of Consumer Advocacy (3)  
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BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In The Matter Of The Application Of

HAWAII ELECTRIC LIGHT COMPANY, INC.

For Approval of Rate Increases and Revised Rate  
Schedules.

DOCKET NO. 99-0207

PUBLIC UTILITIES  
COMMISSION

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HELCO'S FINAL STANDBY SERVICE RIDER PROPOSAL  
AND SUPPORTING STATEMENT

AND

CERTIFICATE OF SERVICE

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Attorneys for  
HAWAII ELECTRIC LIGHT COMPANY, INC.

**BEFORE THE PUBLIC UTILITIES COMMISSION  
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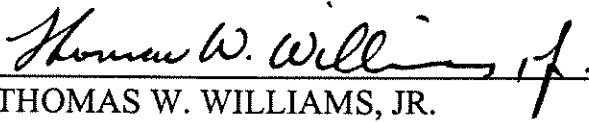
**HELCO'S FINAL STANDBY SERVICE RIDER PROPOSAL  
AND SUPPORTING STATEMENT**

Pursuant to Order No. 18196, issued November 16, 2000, and Order No. 18326 issued January 23, 2001, Hawaii Electric Light Company, Inc. ("HELCO") respectfully submits its Final Standby Service Rider Proposal, and its Supporting Statement.

HELCO's Final Standby Service Rider Proposal is submitted in the form of a proposed "Rider A, Standby Service". By separate letter agreement dated and filed January 24, 2001, HELCO and the Consumer Advocate have agreed that the proposed Rider A is reasonable. The Gas Company ("TGC"), which is a participant in this docket with respect to the standby service rider issue, did not reach agreement with HELCO and the Consumer Advocate.

The Supporting Statement attached hereto provides background regarding the development of the proposed Standby Rider proposal, an explanation of the proposed Standby Rider provisions, and information regarding the development of the Standby Rider Charges. Attached as exhibits to the Supporting Statement are billing examples illustrating the application of the Standby Rider, and workpapers showing the development of the Standby Rider charges.

DATED: Honolulu, Hawaii, January 24, 2001.

  
THOMAS W. WILLIAMS, JR.  
PETER Y. KIKUTA

Attorneys for  
HAWAII ELECTRIC LIGHT COMPANY, INC.

## **FINAL STANDBY SERVICE RIDER PROPOSAL**

1 SETTLEMENT 01/22/01

SHEET NO. 70  
Effective \_\_\_\_\_

2  
3  
4 RIDER A  
5 STANDBY SERVICE  
6

7  
8 APPLICABILITY:  
9

10 Applicable to standby service to customers with alternate  
11 regular source(s) of electric power other than the Company (non-  
12 utility power source(s)). Service under this Rider shall be at  
13 least 25 kW, supplied and metered at a single voltage and delivery  
14 point as specified by the Company.  
15

16 Standby service is the power service that the Company is  
17 obligated to stand ready to supply when the customer's non-utility  
18 power source(s) is unavailable for service. Standby service refers  
19 to Scheduled Maintenance Service or Backup Service, or both.  
20

21 Scheduled Maintenance Service is the standby service supplied  
22 by the Company during the Scheduled Maintenance Period(s) for the  
23 customer's non-utility power source(s) as specified in the Standby  
24 Service Contract.  
25

26 Backup Service is the standby service supplied by the Company  
27 when the customer's non-utility power source(s) is unavailable due  
28 to unscheduled outages.  
29

30 Supplemental Service is the power service supplied by the  
31 Company in addition to the customer's electric power requirements  
32 normally obtained from its non-utility power source(s). The Company  
33 will serve the customer's supplemental service under Schedule J or  
34 Schedule P, whichever is applicable.  
35

36  
37  
38 DETERMINATION OF DEMAND:  
39

40 Standby Demand:  
41

42 The Standby Billing kW for each month shall be the customer's  
43 Contract Standby kW as specified in the Standby Service Contract.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Docket No. 99-0207, D&O No. \_\_\_\_\_.

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RIDER A - Continued

Supplemental Demand:

The Demand Charge of the applicable rate schedule shall apply to the customer's Supplemental Billing kW.

For Schedule J customers, the Supplemental Billing kW for each month shall be the difference between the Total kW Load for such month, or 75% of the highest Total kW Load for the previous eleven months, whichever is higher, less the Standby Billing kW, but not less than 25 kW.

For Schedule P customers, the Supplemental Billing kW for each month shall be the difference between the Total kW Load for such month, or the mean of the current month's Total kW Load and highest Total kW Load for the previous eleven months, whichever is higher, less the Standby Billing kW, but not less than 200 kW.

If the customer qualifies to elect and does elect to limit its Contract Standby kW to the sum of the capacities of its two largest non-utility power sources, then the customer's Supplemental Billing kW shall be determined by subtracting (instead of subtracting the Standby Billing kW) the lesser of:

- (a) the Total Capacity of the customer's non-utility power sources, normally connected and operating in parallel with the Company's system, or
- (b) the maximum measured kW load supplied by such non-utility power sources.

The customer's Total kW Load for each month shall be the maximum time-coincident sum of the measured kW load supplied by the Company and the measured kW load supplied by the customer's non-utility power source(s). The maximum time-coincident measured kW load for each month shall be the maximum time-coincident average load in kW during any fifteen minute period.

RATES:

The rates, terms, and conditions of Schedule J or Schedule P, whichever is applicable, shall apply except that the following Standby Demand Charge, Scheduled Maintenance Service Energy Charge, and Excess Standby Demand Charge shall be added to the customer's bill, and the Minimum Charge and Determination of Demand provisions of this Rider shall supersede the Minimum Charge and Determination of Demand provisions in the applicable standard rate schedule:

HAWAII ELECTRIC LIGHT COMPANY, INC.



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RIDER A - Continued

Standby Demand Charge:

All kW of standby billing demand (Standby Billing kW)-per kW \$11.40

Scheduled Maintenance Service Standby Demand Charge Discount

The Standby Demand Charge will be reduced by 10% for customers who elect and qualify for Scheduled Maintenance Service, provided that such reduction in the Standby Demand Charge shall only apply in each month in which the customer's non-utility power source(s) had no outages or partial outages other than scheduled outages during Scheduled Maintenance Periods. A "partial" outage would occur when a customer's non-utility power source was operated at a capacity of 70% or lower than its nameplate rating (during a period when the customer was receiving supplemental energy from the Company).

Scheduled Maintenance Service Energy Charge:

All maintenance kWh during Scheduled Maintenance Period 8.5000 ¢/kWh

The energy charge for scheduled maintenance service shall apply to the kWh used by the customer as a result of the scheduled maintenance of the customer's non-utility power source(s) during the Scheduled Maintenance Period(s) when the customer's non-utility power source(s) is actually down for maintenance. Such kWh will be based on the lesser of:

- (a) the Scheduled Maintenance kW load specified in the Standby Service Contract for the customer's non-utility power source(s) that is actually down for scheduled maintenance, multiplied by the number of hours when such non-utility power source(s) is down for maintenance as indicated by the meter on such source(s), or
- (b) the measured kWh supplied by the Company during the Scheduled Maintenance Period when the customer's non-utility power source(s) is actually down for maintenance.

Backup Service Energy Charge:

The charge for energy taken under Backup Service shall be the energy rates applicable for supplemental service, which are the energy rates under Schedule J or Schedule P.

HAWAII ELECTRIC LIGHT COMPANY, INC.

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RIDER A - Continued

Excess Standby Demand Charge:

A customer with at least three non-utility power sources, with each such source separately metered, may elect to limit its Contract Standby kW to the sum of the capacity of its two largest power sources, subject to the Terms and Conditions of this Rider. If a customer makes this election and its standby service requirements during a month exceed its Contract Standby kW, then the excess standby service demand (i.e., the difference between the customer's maximum Standby Service Requirement and the Contract Standby kW) shall be billed at the following Excess Standby Demand Charge.

Excess Standby Demand Charge - per Excess Standby kW           \$30.00

The customer's standby service requirement for each fifteen minute period shall be the lesser of:

- (a) the Total Capacity of the customer's non-utility power source(s) connected and operating in parallel with the Company's system less the measured kW supplied by such sources during each fifteen minute period, or
- (b) the measured kW supplied by the Company during the same fifteen minute period plus the Standby Contract kW.

The Customer's Excess Standby kW for the month shall be the difference between the customer's maximum Standby Service Requirement for any fifteen minute period during the month, less the customer's Contract Standby kW.

The Excess Standby kW will be added to the customer's Contract Standby kW to reset a new Contract Standby kW in each succeeding billing month.

Supply Voltage Adjustment:

The Supply Voltage Adjustment in the applicable standard rate schedule shall apply to the Standby Demand Charge (after application of the Scheduled Maintenance Service Standby Demand Charge Discount, if any), the Excess Standby Demand Charge, and the Scheduled Maintenance Service Energy Charge.

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RIDER A - Continued

MINIMUM CHARGE:

The monthly minimum charge shall be the sum of the Minimum Charge under the applicable rate schedule, the Standby Demand Charge and Excess Standby Demand Charge. Where the Company determines that the installed capacity of the customer's non-utility power source(s) exceeds the customer's total kW requirement as determined by the Company, the monthly minimum charge shall be the sum of the Customer Charge under the applicable rate schedule, the Standby Demand Charge, and the Excess Standby Demand Charge.

For Schedule J customers, the kW used in the Minimum Charge calculation shall be the Total kW Load for the month, or the greatest Total kW Load for the preceding eleven months, whichever is higher, less the Standby Billing kW, but not less than 25 kW.

For Schedule P customers, the kW used in the Minimum Charge calculation shall be the Total kW Load for the month, or the greatest Total kW Load for the preceding eleven months, whichever is higher, less the Standby Billing kW, but not less than 200 kW.

If the customer qualifies to elect and does elect to limit its Contract Standby kW to the sum of the capacities of its two largest non-utility power sources, then the kW used in the Minimum Charge calculation shall be determined by subtracting (instead of subtracting the Standby Billing kW) the lesser of:

- (a) the Total Capacity of the customer's non-utility power sources, normally connected and operating in parallel with the Company's system, or
- (b) the maximum measured kW load supplied by such non-utility power sources.

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RIDER A - Continued

TERMS AND CONDITIONS:

1. This Rider shall apply when a customer regularly obtains power service from a source(s) other than the Company, and obtains supplemental service from the Company when its non-utility power source(s) capability is less than its total power requirements; and/or requires standby service from the Company.
2. This Rider shall not apply when a customer's non-utility power source(s) is used exclusively for emergency service in case of failure of the normal supply of power service from the Company, or to a customer that has an Agreement with the Company which provides for the sale of electric energy and/or capacity to the Company that was approved by the Commission prior to October 25, 1999, or to a customer whose non-utility power is produced from a non-fossil energy source.
3. The connection and operation of the customer's non-utility power source(s) in parallel with the Company's system will be permitted when the customer is served under this Rider, and in accordance with the terms of a contract with the Company for parallel interconnection.
4. Customers receiving service under this Rider shall sign a Standby Service Contract with the Company, which shall specify the Contract Standby kW for standby service required from the Company, and the Scheduled Maintenance Service, if any, elected by the customer.
5. The Contract Standby kW initially will be based on the Total Capacity of the customer's non-utility power source(s) (except as provided below), or will be jointly determined by the Company and the customer.

The Total Capacity of the customer's non-utility power source(s) will be determined by, but not limited to, such indicators as the nameplate rating(s) of the generating unit(s), and the design specifications and operating characteristics of the generating unit(s).

HAWAII ELECTRIC LIGHT COMPANY, INC.

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RIDER A - Continued

TERMS AND CONDITIONS - Continued

The Contract Standby kW, when jointly determined by the Company and the customer, must be determined by the Company to be reasonable given the Total Capacity of the customer's non-utility power sources, which are connected and operated in parallel with the Company's system, the extent to which the capacity of the customer's service connection is limited, and such other information as the Company considers pertinent to the determination of the appropriate Contract Standby kW requirements of the customer.

The Contract Standby kW normally will not be less than the lesser of (a) the Total Capacity of the customer's non-utility power source(s) (except as provided below), or (b) the greatest Total kW Load for the twelve months preceding commencement of service under this rider, or execution of the Standby Service Contract, whichever is earlier.

In the event that the maximum measured kW load supplied by the customer's non-utility power source(s) exceeds the Contract Standby kW (except as provided below), then the Contract Standby kW shall be automatically adjusted to an amount equal to the maximum measured kW load beginning with the month in which the maximum measured kW load occurred. Each such automatically adjusted Contract Standby kW shall be in effect thereafter for such customer, unless superceded by another automatically adjusted Contract Standby kW.

A customer with at least three non-utility power sources, with each such source separately metered, may elect to limit its Contract Standby kW to the sum of the capacities of its two largest non-utility power sources. If such a customer incurs Excess Standby kW, such Excess Standby kW will be added to the customer's Contract Standby kW to reset a new Contract Standby kW in each succeeding billing month.

A customer electing to limit its Contract Standby kW to the sum of the capacities of its two largest power sources shall also elect Scheduled Maintenance Service for its non-utility power sources, and shall take scheduled maintenance for only one of its non-utility power sources at a time.

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RIDER A - Continued

TERMS AND CONDITIONS - Continued

6. The customer must notify the Company of any changes in its non-utility power source(s) that may affect its Contract Standby kW specified in the Standby Service Contract. The Company may, from time to time, verify the customer's Contract Standby kW specified in the Standby Service Contract. Where the Company determines that the Contract Standby kW requires adjustment, the Company shall inform the customer in writing 60 days before such change becomes effective.
7. The maximum instantaneous demand may be limited by contract. When the capacity of the service connection is limited to conform with the Contract Standby kW, the customer shall provide, install and maintain at its expense, and the Company shall control, any circuit breaker and other equipment necessary to limit the service connection to the Contract Standby kW.
8. The Company shall not be liable for any consequential damages caused by, or resulting from any limitation of kW capacity supplied to the customer under this Rider.
9. Scheduled Maintenance Service under this rate Schedule shall be for power service during the Scheduled Maintenance Period of the customer's non-utility power source(s). A customer electing to take Scheduled Maintenance Service shall specify in the Standby Service Contract whether it is taking Standard Scheduled Maintenance Service, or Off-peak Scheduled Maintenance Service (if it is eligible for such option).

For Standard Scheduled Maintenance Service, maintenance for a customer's non-utility power source must be scheduled no more than two times per year, for a total period not to exceed three weeks, and is subject to the following terms and conditions:

- a. The Scheduled Maintenance Periods shall not exceed a total of 3 weeks per non-utility power source within a calendar year. A non-utility power source cannot be down for maintenance more than 2 times during the calendar year.

HAWAII ELECTRIC LIGHT COMPANY, INC.

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RIDER A - Continued

TERMS AND CONDITIONS - Continued

- b. The customer shall specify its initial Scheduled Maintenance Periods (to be taken during the first calendar year or partial calendar year in which it takes Standard Scheduled Maintenance Service), subject to review and approval by the Company, in the Standby Service Contract. Prior to July 1 of each year, the customer shall submit in writing to the Company any changes to the Scheduled Maintenance Periods for the following calendar year. Where the Company indicates within 60 days that any such changes are not acceptable to the Company based on operating, technical or other similar reasons, the Company and the customer will work together to determine the changes to the Scheduled Maintenance Periods that are reasonable and acceptable to both parties.
- c. Either HELCO or the customer may request one change in the start date and/or duration of any scheduled outage by written request (specifying the reason for such request, and the proposed start date and/or duration of the scheduled outage) made at least thirty days before the scheduled start of such outage. HELCO and the customer will make reasonable efforts to accommodate such requests (by written responses given within one week of receiving such requests).

A customer with one or more non-utility power source(s) with capabilities of less than or equal to 500 kW, may elect Off-peak Scheduled Maintenance Service where the Scheduled Maintenance Periods occur only during the Company's off-peak period, subject to the following conditions:

- a. A power source (or power sources up to a maximum capability of 500 kW) can be maintained during off-peak hours with one-week prior notice to HELCO. Notice can be given either by phone, fax, or e-mail, and must include the meter number for the power source(s) to be maintained and the expected additional kW demand to be provided by the Company during the Scheduled Maintenance Service period(s). Off-peak hours are 9 p.m. - 7 a.m., daily.

HAWAII ELECTRIC LIGHT COMPANY, INC.

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RIDER A - Continued

TERMS AND CONDITIONS - Continued

- b. Maintenance on the same power source can be scheduled no more than twice within a four-week period. The customer must call the Company in advance of shutting off and/or starting up its power source that will be maintained under this provision.
  - c. The Standby Service Contract must specify the non-utility power source(s) and meter numbers of the sources to be maintained during off-peak hours under the above terms. Such power sources are not eligible for Standard Scheduled Maintenance Service.
10. The customer's non-utility power source(s) shall be metered, unless the Company deems such metering to be impractical for engineering or operating reasons. If the customer's non-utility power source(s) cannot be metered by the Company, then the customer's Total kW Load for each month shall be the sum of the maximum measured kW load supplied by the Company and the Contract Standby kW, and the customer shall not be eligible for Scheduled Maintenance Service. If the customer has more than one non-utility power source, and elects scheduled maintenance service for only one of its non-utility power sources at a time, then each of the customer's non-utility power sources shall be separately metered.
11. The Company shall install, own, operate, maintain, and read meters on the customers non-utility power source(s) for billing purposes. The customer shall be responsible for any cost associated with metering its non-utility power source(s), including the total installed cost of the meters. All meters shall be installed at some convenient place approved by the Company upon the customer's premises, and shall be so placed as to be accessible at all times for inspection, reading, and testing.



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RIDER A - Continued

TERMS AND CONDITIONS - Continued

When the Company performs maintenance work on the meters on the customer's non-utility power source(s), the Company shall bill the customer for the total cost associated with such maintenance including labor and material costs, and shall add this amount to the customer's electric bill for the period. The Company shall provide the customer with the breakdown of such maintenance costs such as the labor cost, materials and supplies, taxes, and any other cost incurred.

The customer shall, at its expense, furnish, install and maintain in accordance with the Company's requirements all associated equipment such as all conductors, service switches, fuses, meter sockets, meter and instrument transformer housing and mountings, switchboard meter test buses, meter panels, and similar devices, required for service connection and meter installations on customer's premises.

The customer shall at its expense, provide a dedicated telephone line to connect the meter(s) to the Company's communication system.

The meter(s) shall be ratcheted to prevent reversal or reverse registration.

12. The term of contract under this Rider is at least one (1) year, and the contract shall remain in effect from month-to-month thereafter, unless terminated by either party upon thirty (30) days prior written notice to the other party.

13. Service supplied under this Rider shall be subject to the Rules and Regulations of the Company.

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RIDER A CONTRACT FORM  
Standby Service

This Contract covers Standby Service provided by HAWAII ELECTRIC LIGHT COMPANY, INC. (HELCO) to:  
Customer: \_\_\_\_\_ Account Number: \_\_\_\_\_  
Service Address: \_\_\_\_\_

Under this Contract, the electric service provided by HELCO to the customer's service location shall be served on rate Schedule \_\_\_\_\_ and Rider A. All terms of Schedule \_\_\_\_\_ shall apply, except as further specified in Rider A and in this Contract.

The standby service under Rider A shall be: (check one)  
\_\_\_\_\_ Backup Service \_\_\_\_\_ Scheduled Maintenance Service

If customer elects Scheduled Maintenance Service: (check one)  
\_\_\_\_\_ Standard Scheduled Maintenance Service  
\_\_\_\_\_ Off-peak Scheduled Maintenance Service

Contract Standby kW \_\_\_\_\_ (1)  
Installed kW Capacity of Each Non-Utility Power Source \_\_\_\_\_ (2)  
Total Number of Non-Utility Power Sources \_\_\_\_\_ (3)  
Scheduled Maintenance Periods & Non-Utility Power Sources to be maintained: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

This Contract shall become effective at the beginning of the first regular billing cycle following \_\_\_\_\_ (date) or the first billing period after the installation of the required meters for service under Schedule \_\_\_\_\_ and Rider A, whichever occurs later.

The parallel interconnection of the customer's non-utility power sources with the Company's system shall be permitted in accordance with the terms and conditions specified in a contract for parallel interconnection.

Term of Contract shall be at least one year, and shall continue thereafter month-to-month until terminated by either party upon thirty (30) days prior written notice to the other party. This Contract may be terminated at any time by mutual agreement of the Company and the customer.

Authorized Customer Signature:	HELCO Representative:
_____ _____ Name                    Date	_____ _____ Name                    Date
_____ Title	_____ Title
_____ Company	

HAWAII ELECTRIC LIGHT COMPANY, INC.

## **SUPPORTING STATEMENT**

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF HAWAII

In The Matter Of The Application Of

HAWAII ELECTRIC LIGHT COMPANY, INC.

For Approval of Rate Increases and Revised Rate  
Schedules.

DOCKET NO. 99-0207

SUPPORTING STATEMENT

This Supporting Statement is respectfully submitted on behalf of Hawaii Electric Light Company, Inc. ("HELCO" or the "Company") in support of the Final Standby Service Rider Proposal (proposed "Rider A") agreed upon by HELCO and the Consumer Advocate.<sup>1</sup> The Gas Company ("TGC"), which is a participant in this docket with respect to the standby service rider issue, did not reach agreement with HELCO and the Consumer Advocate.

A. BACKGROUND

1. Purpose

Self generating and partial requirements utility customers have a need for utility standby service. The need arises when the customer's primary non-utility supply sources become unavailable, either due to forced outages of their own generation or scheduled outages of their own generation for maintenance purposes.<sup>2</sup>

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<sup>1</sup> The Consumer Advocate has not reviewed this Supporting Statement.  
<sup>2</sup> Standby service is, in effect, an insurance policy against the likelihood of events making a customer's own, non-utility generation unavailable. (Standby service reduces the risk for a customer that either self-generates or purchases power from an unfamiliar source.) Standby service provides customers the assurance that if their own, on-site generators are not producing power, the utility will provide the power instead. See HELCO RT-18A, page 4.

The proposed Rider A (Standby Service rate) is the electric power service that HELCO is obligated to provide during those periods when a customer's non-utility source of electric power is not available to provide electric energy for the customer's electrical load.<sup>3</sup> The proposed Rider A specifies the availability of standby service, and provides the rates, terms, and conditions under which standby service will be provided by HELCO.

In general, the objectives of providing a standby service rate are to: (1) allow HELCO to be adequately compensated for providing standby service under a Commission-approved standard standby service rider; (2) allow HELCO to more accurately and equitably charge customers for the demand-related costs associated with providing standby service and thereby move closer to cost of service; and (3) provide a mechanism that avoids having full service customers subsidize standby service customers.

Rider A (Standby Service rate) provides a mechanism for HELCO to more accurately and appropriately recover the fixed demand-related costs of serving the customers that may require standby service from HELCO, rather than recovering the costs from other customers. Customers that require service from HELCO while their other sources of energy are down for maintenance or unavailable for service, cause the Company to incur the fixed costs of providing and maintaining the plant facilities to serve these customers upon demand. If a standby service rate is not approved, customers that do not have standby service will subsidize customers that use standby service. Customers that do not have standby service will have higher base electric rates than if the part of the revenue requirements that represents the cost of the standby service was borne and paid for by customers that use standby service.

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<sup>3</sup> The Public Utility Regulatory Policies Act of 1978, as amended ("PURPA"), and the rules of this Commission implementing PURPA, require electric utilities to provide standby service to qualifying facilities. See Section 6-74-25(d) of the Hawaii Administrative Rules.

## 2. Types Of Standby Service

There are several types of standby service. These include (1) "supplemental" or "supplementary" service, which is capacity and/or energy supplied by the utility that is regularly used by a customer in addition to what the customer generates itself, (2) "backup" service, which is capacity and/or energy supplied by the utility during unscheduled outages of the customer's own generation, and (3) "maintenance" service, which is capacity and/or energy supplied by the utility during scheduled outages of the customer's own generation. Most of the tariffs of other utilities providing standby service focus on the provision of backup service, and supplementary service (which is often provided under the utilities' regular rate schedules for commercial or industrial customers).<sup>4</sup>

## 3. Big Island Situation

The need to establish separate standby service charges is no longer based only on the potential that customers will self-generate all or part of their own loads, while continuing to remain connected to the grid (and thereby obtaining back up power from HELCO).

A number of HELCO's customers have or are in the process of installing on-site generation facilities. Cogeneration vendors have made (and are making) on-site cogeneration proposals to HELCO's customers. Representatives of several cogeneration vendors testified at the January 26, 2000 public hearing for HELCO's rate case (Docket No. 99-0207) that they were contacting HELCO's customers with proposals to install cogeneration facilities. A TGC representative also testified at the public hearing that it has entered into a contract with a vendor ("SRS") of on-site generators to supply fuel for cogeneration facilities installed by SRS.

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<sup>4</sup> It may be difficult to determine the types of service (and the amount of each type of service) a standby service customer is receiving at any point in time. For example, when a utility supplies energy to a customer, it cannot determine whether the energy is supplemental energy to that which the customer can generate itself, or is backup energy because the output of the customer's own generation has been reduced -- unless the utility meters the output of the customer's own generation as well as the energy the utility supplies to the customer.

In addition, several hotels have entered (or are planning to enter) into contracts with cogeneration vendors to install on-site cogeneration facilities. All six South Kohala hotels have been contacted by alternative service providers. The six hotels had combined sales of 70,600,000 kwh, or approximately 7.7% of HELCO's total sales in 1999. HELCO was informed by letter dated August 4, 2000 that one of its largest customers, The Orchid at Mauna Lani, would be installing its own generation. Another South Kohala hotel was seeking a non-covered source permit from the Hawaii Department of Health to install four generators, which would be more than adequate to cover 100% of the hotel's current load. Further, a representative of the University of Nations testified at the January 26, 2000 public hearing (and subsequently submitted a letter dated January 27, 2000 stating) that the University of Nations had installed a cogeneration plant.<sup>5</sup>

**B. STANDBY RIDER PROPOSAL**

**1. Standby Load**

If a non-utility source (e.g., a customer's on-site generating unit) is operated in parallel with the Company's system, the Company is effectively providing backup service for that unit and Rider A charges should apply. If the customer's unit trips out, or if its output is reduced, the energy that was being supplied by the customer's unit will automatically be drawn from the Company's system, unless the customer's load is somehow limited by a load limitation device at the point of interconnection.

Therefore, Condition No. 5 provides that the load subject to the standby charge (the Contract Standby kW<sup>6</sup>) will be based on the total capacity of the customer's non-utility power source(s) or will be jointly determined by the Company and the customer. If the total capacity of

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<sup>5</sup> See Docket No. 00-0054, HELCO letter to the Commission filed August 25, 2000; response to CA-IR-2016 in this docket.

the customer's non-utility power source(s) is less than the customer's total load, the Contract Standby kW normally would be set equal to the total capacity (unless the customer is eligible for and elects to take the multiple unit option discussed below).

If the customer's total expected load is less than the total capacity of its non-utility power source(s), the Company and the customer could agree to limit the Contract Standby kW to the customer's expected total load. Condition No. 5 provides that the customer's expected total load would not be less than its maximum load in the previous 12 months. (However, it could be higher. For example, the customer could increase its own load at the same time that it installed on-site generation.)

If the output of the customer's non-utility power source(s) exceeds the Contract Standby kW, then the Contract Standby kW will be automatically adjusted.

As stated above, if a customer's non-utility power sources are operating in parallel with HELCO's system, then HELCO is backing up the power sources. Nevertheless, if the customer has three or more non-utility power sources, and each source is separately metered, HELCO has included a provision in Condition No. 5 that would allow the customer to elect to limit its Contract Standby kW Load to the capacity of its two largest units. The proposed conditions for election of this option, and the charges applicable if the customer's standby requirements actually exceed the designated standby load, are included in Condition No. 5 and in the Excess Standby Demand Charge provision.

The theory behind the provision is that it is less likely that a customer with multiple generating units will have simultaneous outages of more than two units at the same time (even if one unit is on scheduled maintenance). However, it remains to be seen whether this theory will

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<sup>6</sup> The Contract Standby kW will be specified in a Standby Service Contract, as provided for in Condition No. 4 to Rider A. The form of the contract is attached to Rider A.



hold true in practice, since customers may not install the kinds of redundant features (fuel pumps, control systems, etc.) that utilities install to guard against single contingencies causing multiple generating unit outages. Therefore, if the customer's actual standby service requirements turn out to be greater than the capacity of the customer's two largest non-utility power sources, then the customer will have to pay an Excess Standby Demand Charge, and the customer's Contract Standby kW will be reset (as discussed below under "Excess Standby Demand Charge").

HELCO is not aware of any other utility that offers a similar provision that could significantly reduce the amount of standby demand for which a standby customer is required to pay, and the inclusion of such a provision has added to the complexity of HELCO's proposed Rider A.

The customer may want to limit its Contract Standby kW by agreeing to limit the maximum instantaneous demand it can place on the Company's system, in which case the customer and the Company would agree in the Standby Service Contract to limit the capacity of the customer's service connection to the Contract Standby kW. In that case, Condition No. 7 provides that the customer must provide, install, and maintain at its expense, and the Company will control, any circuit breaker and other equipment necessary to limit the service connection to the Contract Standby kW.

Condition No. 6 provides that the customer must notify the Company of any changes in its non-utility power source(s) that may affect its Contract Standby kW. The Company may verify the customer's standby service requirement. If the Company determines that the Contract Standby kW requires adjustment, the Company will inform the customer in writing 60 days before the change becomes effective.

**2. Standby Demand Charge**

HELCO has reduced the proposed Standby Demand Charge to \$11.40 per kW of standby billing demand.<sup>7</sup> The standby billing demand is equal to the Contract Standby kW. The charge will be further reduced (1) by 10% (to \$10.26 per kW) for a customer electing to take Scheduled Maintenance Service, in months in which the only outages or partial outages the customer has for its non-utility power source(s) are scheduled maintenance outages, and (2) by a 5% Supply Voltage Adjustment (to an effective \$9.75 per kW or \$10.83 per kW, depending on whether the customer also qualifies for the Scheduled Maintenance Service Demand Charge Discount) if the customer receives service at the primary distribution level, instead of the secondary distribution level.

The 10% Standby Demand Charge discount provides an additional incentive for standby customers to schedule maintenance outages of their non-utility power sources with the utility (and recognizes that there should be a benefit to utilities, albeit a benefit that is difficult to quantify) if standby customers coordinate their maintenance outages with the utility, or take them only during off-peak periods. Customers are further incentivized to schedule maintenance outages in order to qualify for the lower scheduled maintenance energy charge and to qualify for the reduction in contract standby demand for customers with three or more non-utility units.

The 5% discount for customers taking service at the primary distribution level is the same as the discount found in Schedules P and J (although the discount is reduced to 4% in those schedules when energy is metered on the secondary side of the customer's transformer). HELCO does not propose to establish a separate discount (such as that in Schedule P) for customers taking service at the transmission voltage, because it does not have any such customers.

**3. Scheduled Maintenance Service**

Scheduled Maintenance Service is the standby service supplied by the Company during the Scheduled Maintenance Period(s) for the customer's non-utility power source(s). As stated above, the standby demand charge rate will be reduced by 10% for customers who elect and qualify for Scheduled Maintenance Service, provided that the discount applies only in each month in which the customer's non-utility power source(s) had no outages or partial outages other than scheduled outages during Scheduled Maintenance Periods. A "partial" outage occurs when a customer's non-utility power source was operated at a capacity of 70% or lower than its nameplate rating.

The energy charge for scheduled maintenance service is 8.5¢ per kwh. It applies to the kwh used by the customer as a result of the scheduled maintenance of the customer's non-utility power source(s) during the Contract Maintenance Period(s) when the customer's non-utility power source(s) is actually down for maintenance. The kwh will be based on the Scheduled Maintenance kW Load specified in the Standby Service Contract for the customer's non-utility power source(s) that is actually down for maintenance multiplied by the number of hours when the non-utility power source(s) is down for maintenance, or the measured kwh supplied by the Company during the Scheduled Maintenance Period when the customer's non-utility power source(s) is actually down for maintenance, whichever is less.

The maintenance energy rate is set lower than the energy rates in Schedules J and P (i.e., at a rate equal to the average energy costs for Schedule J/P without demand costs<sup>8</sup>), because the standby demand charge is intended to include the appropriate demand costs for this portion of the customer's service. However, the maintenance energy rate only applies to the block of

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<sup>7</sup> See Exhibit 2 to this Supporting Statement.  
<sup>8</sup> See Exhibit 1 to this Supporting Statement.

energy normally supplied by the customer's non-utility power sources that are on scheduled overhaul. Proposed Rider A calculates that block of energy by multiplying the contract standby demand applicable to the customer's non-utility power sources on scheduled maintenance by the hours that the power sources are on scheduled maintenance (unless the customer purchases a lesser amount of energy from the Company). This gives the customer the benefit of the doubt, because it assumes that the customer's non-utility power sources would have operated continuously at full load had they not been on scheduled maintenance. Because the lower maintenance energy rate only applies to non-utility power sources that are actually turned off, and because the total charge (energy charge plus demand charge) is lower than the total charge for supplemental service, HELCO has limited the total maintenance period to a designated number of weeks (3 weeks), and has included a requirement that each standby unit be separately metered (so that HELCO can verify that the non-utility power sources are off) if the customer plans to take only a fraction of its non-utility power sources down for scheduled maintenance at a time.

The customer that takes scheduled maintenance service must specify in the Standby Service Contract whether it is taking Standard Scheduled Maintenance Service or Off-peak Scheduled Maintenance Service (if it is eligible for such option).

For Standard Scheduled Maintenance Service, the Scheduled Maintenance Period cannot exceed a total of 3 weeks per non-utility power source within a calendar year. Each non-utility power source cannot be down for maintenance more than 2 times during the calendar year. The customer must specify its initial Schedule Maintenance Periods in the Standby Service Contract (to be taken during the first calendar year or partial calendar year in which it takes Standard Scheduled Maintenance Service), subject to review and approval by the Company. Prior to July 1 of each year, the customer must submit in writing to the Company any changes to the

Schedule Maintenance Periods for the following year. Where the Company indicates within 60 days that any changes are not acceptable to the Company based on operating, technical, or other similar reasons, the Company and the customer will work together to determine the changes to the Scheduled Maintenance Periods that are reasonable and acceptable to both parties.

The Off-peak Scheduled Maintenance Service option is limited to standby customers with smaller (500 kW or less) non-utility power sources that can be maintained exclusively during the daily off-peak periods (from 11 p.m. to 9 a.m.). Only one week's prior notice is required before each scheduled outage under this option.

#### **4. Supplemental Service**

Supplemental Service is the power service supplied by the Company in addition to the customer's electric power requirements normally obtained from its non-utility power source(s). The Company will serve the customer's supplemental service under Schedule J or Schedule P, whichever is applicable.

Generally speaking, the Supplemental Billing kW is found by taking the Total kW load, which is the maximum time-coincident sum of the measured kW load supplied by the Company and the measured kW load supplied by the customer's non-utility power source(s), and subtracting the Contract Standby kW. For Schedule J customers, the Supplemental Billing kW for each month will be the difference between the Total kW Load for such month, or 75% of the highest Total kW Load for the previous eleven months, whichever is higher, less the Standby Billing kW, but not less than 25 kW. For Schedule P customers, the Supplemental Billing kW for each month will be the difference between the Total kW Load for such month, or the mean of the current month's Total kW Load and highest Total kW Load for the previous eleven months, whichever is higher, less the Standby Billing kW, but not less than 200 kW. (In other words, the demand ratchets that are presently in Schedules J and P apply to the supplemental billing

demand, which will be billed based on the demand charges in Schedules J and P.)

By calculating the supplemental billing kW in this manner, the Company avoids the issue of double-charging for the same kW. In the Company's direct testimony proposal and rebuttal proposal, under certain billing assumptions, the customer would have paid the standby demand charge for his Contract Standby kW and would have paid for the same kW under the supplemental billing kW as well. The current Rider A proposal eliminates this double-charging issue.

As stated above, supplemental service will be billed under the regular rate Schedule J or Schedule P. The calculated supplemental billing kW is billed at the regular rate schedule's demand charge rate. All of the kwh purchased by the Rider A customer are billed at the regular rate schedule's energy charge rates, except for the energy that is billed at the Scheduled Maintenance Energy Rate. The power factor adjustment and supply voltage adjustment in Schedules J and P still apply to the demand and energy charges resulting from the supplemental billing kW and supplemental/standby energy kwh.

**5. Minimum Charge**

In Rider A, the definition of minimum charge modifies the definition of minimum charge in the regular rate schedule. For a Rider A customer, the monthly minimum charge is the sum of the Minimum Charge of the applicable standard rate schedule, the Standby Demand Charge, and the Excess Standby Demand Charge. Where the Company determines that the installed capacity of the customer's non-utility power source(s) exceeds the customer's total kW requirement as determined by Company, the monthly minimum charge will be the sum of the customer's Customer Charge under the applicable rate schedule, the Standby Demand Charge, and the Excess Standby Demand Charge. For Schedule J customers, the kW used in the Minimum Charge calculation will be the Total kW Load for the month, or the greatest Total kW Load for

the preceding eleven months, whichever is higher, less the Contract Standby kW, but not less than 25 kW. For Schedule P customers, the kW used in the Minimum Charge calculation shall be the Total kW Load for the month, or the greatest Total kW Load for the preceding eleven months, whichever is higher, less the Contract Standby kW, but not less than 200 kW. (This simply incorporates the demand ratchet feature already found in the minimum charge provisions in Schedules J and P.)

**6. Excess Standby Demand Charge**

Excess Standby Demand can only arise in the situation where a customer with at least three non-utility power sources has elected to limit its Contract Standby kW to the total capacity of its two largest power sources, but its standby service requirements exceed its Contract Standby kW. Generally, the customer's standby service requirements at any time are equal to the total capacity of the customer's non-utility power source(s) less the time-coincident sum of the measured kW supplied by the customer's non-utility power sources. (In other words, if the customer has three 200 kW units serving its own load, but only chooses to backup 400 kW instead of 600 kW, then the customer should always supply at least 200 kW of its own load.) The Excess Standby Service Demand equals the customer's maximum standby service requirements less the Contract Standby kW. The customer will be billed for the Excess Standby Service Demand at \$30 per kW in the month in which the excess demand is incurred and the Excess Standby Service Demand kW will be added to the Contract Standby kW to reset a new Contract Standby kW for each succeeding month.

**7. Supply Voltage Discount**

A 5% voltage adjustment (i.e., discount) applies to the Rider A charges (the Standby Demand Charge, the Excess Standby Demand Charge, and the Scheduled Maintenance Service Energy Charge) for standby customers who take service at the primary distribution level. For the

purposes of this discount, the Standby Demand Charge is the applicable Standby Demand Charge rate (with or without the 10% discount for Scheduled Maintenance Service, whichever applies) multiplied by the Contract Standby kW.

**8. Applicability**

As provided in Condition No. 1, Rider A applies to a customer that regularly obtains power service from a power source(s) other than the Company, and obtains supplemental service from the Company when the capacity of its non-utility power source(s) is less than its total power requirements, or when the customer requires standby service from the Company even though the capacity of its non-utility power source(s) equals or exceeds its expected total load.

The customer who wants to connect and operate its non-utility power sources in parallel with the Company's system must be served under this Rider (and also must agree to the terms of a contract for parallel interconnection). If a non-utility power source is operated in parallel with the Company's system, the Company is effectively providing backup for that power source and Rider A charges should apply. Conversely, the customer who is willing to isolate the load served by its his non-utility power sources from the Company's system is not subject to Rider A charges, but this customer will not be able to obtain standby service or supplemental service from the Company.

Condition No. 2 provides that Rider A does not apply when a customer's non-utility power source(s) is used exclusively for emergency service in case of failure of the normal supply of power service from the Company or to a customer that has an Agreement with the Company which provides for the sale of electric energy and/or capacity to the Company that was approved by the Commission prior to October 25, 1999, or to a customer whose non-utility power is produced from a non-fossil energy source. The customer's use of its emergency service capability is standby that it provides itself, rather than Company provided capability, so it is not



charged. Power purchase providers who require standby service will be subject to Rider A unless their PPA was approved prior to October 25, 1999, the date of the rate case filing that included the proposed Rider A.

The Company supports renewable energy as a general policy and would therefore exclude non-fossil energy sources from the Rider A charges. The proposed exception for renewable resources, takes into account the encouragement of small renewable projects (such as photovoltaic installations), the expectation that such projects will be limited in number and size, and the expectation that HELCO will still be serving a substantial percentage of the energy and capacity needs of such customers. Having an exception for renewable energy on-site generation does not change or affect the fairness of charging the users of fossil-fueled on-site generators for the cost of providing standby service.

**9. Overlap with Schedules J/P**

Rider A operates in tandem with regular rate Schedules J and P. To determine the supplemental kW load to be billed under the regular rate schedule, HELCO needs to know the customer's Total kW Load and the Contract Standby kW as determined under Rider A. In order to bill the energy under the regular rate schedule, HELCO first subtracts any kwh billed under the Scheduled Maintenance Energy rate from the total kwh delivered by HELCO to the customer, and then bills the energy based on the supplemental kW demand.

The power factor adjustment in the regular rate schedule will apply to the supplemental kW charge and the energy charges in the regular rate schedule. Since all the kwh and kvarh will be provided through one meter, and since all the kwh, except for scheduled maintenance energy kwh, will be billed on the regular rate schedule, it is not necessary to have a power factor adjustment in Rider A.

The supply voltage adjustment in the regular rate schedule also will apply to the supplemental kW charge and the energy charges in the regular rate schedule.

**10. Metering**

The customer's non-utility power sources must be metered, so that the Total kW Load can be determined for billing purposes. If the customer's non-utility power sources cannot be metered by the Company, then the customer's Total kW Load for each month shall be the sum of the maximum measured kW load supplied by the Company and the Contract Standby kW, and the customer shall not be eligible for Scheduled Maintenance Service. If the customer has more than one non-utility power source, and elects scheduled maintenance service for only one of its non-utility power sources at a time, then each of the customer's non-utility power sources must be metered separately. See Condition No. 10.

The customer is responsible for all metering expenses, including the installed cost of the meter, the meter infrastructure on the customer premises, maintenance work on the meter, and the telephone to link the meter to the Company's communication system for the meters on the customer's non-utility power sources. The Company provides the meter for the measurement of Company-provided kW and kWh, as it does for its other customers. The concept that the customer is responsible for the costs of the additional infrastructure necessary to implement the Rider A is similar to the implementation of Rider I, where the customer would be responsible for the cost of the installation of underfrequency relays. See Condition No. 11.

**11. Billing Examples**

Exhibit 3 to this Supporting Statement includes several billing examples illustrating the application of the provisions in Rider A, and the overlap with Schedules J and P.

### C. DERIVATION OF STANDBY DEMAND CHARGES

#### 1. Introduction

There is no clear-cut industry standard for designing and implementing standby rates (or standby tariffs/riders<sup>9</sup>), and the approach can vary from utility to utility within the same state.

Nonetheless, a number of factors should be considered in designing standby service rates. The standby service rates should be fair to the customer while reflecting the unique characteristics of the utility system, the costs of providing the service, the requirements placed on the utility system by the standby service customer, and most importantly, the impacts on other customers. If the standby service customer does not adequately pay for the system's costs of providing it service, the unpaid amounts will fall onto the other full service customers, who will be required to pay such costs.<sup>10</sup> See HELCO RT-18A, page 16.

Also, there are several related principles that should guide the design of standby service rates. First, the rate should fully recover the cost of providing service to standby service customers. Second, the rate should send the proper price signals such that economically efficient decisions on the part of self-generators to secure standby service results. Third, the rate design should ensure that the system's captive customers are protected from the non-recovery of costs associated with standby service to large users with alternative choices for service. Subsidization of costs for the more independent standby service customers at the expense of captive customers should be avoided. See HELCO RT-18A, page 17.

<sup>9</sup> An April 1991 Edison Electric Institute ("EEI") study (page 12) on standby rates indicated that most utilities build standby rates through modifications of their general service tariffs. A copy of the April 1991 study entitled "Standby Rates: Methods and Descriptions" ("Standby Rates"), which was done by the EEI Rate Regulation Department, was separately filed on July 17, 2000 in response to TGC-RIR-18A026.

<sup>10</sup> According to a 1995 study by Lori Megdal and Eric Ackerman entitled "Standby Services and Efficient Competition: Designing for the Markets of the Future" ("Megdal/Ackerman Study"): All too often however, standby services have been underpriced. Also, there are states in which standby services are not priced separately; creating potential subsidies to these customer from the other customers in their rate class (i.e., intra-class equity problems). HELCO RT-18A, page 7. A copy of the Megdal/Ackerman Study was filed in the response to TGC-RIR-18A005 (pages 2-20).

In determining the amount of the Standby Demand Charge, it is important to consider HELCO's demand costs, rather than its existing demand charges for Schedule J and Schedule P customers, which are still set well below such demand costs. (HELCO's Schedule J/P energy rates recover a large portion of HELCO's demand and customer costs, because HELCO's demand charges are substantially lower than its demand costs, and HELCO's customer charges are substantially lower than its customer costs.) Because of this, lost energy sales result in non-recovery of a significant amount of demand and customer costs, in addition to the non-recovery of energy costs.<sup>11</sup>

## **2. Distribution And Transmission Demand Costs**

The standby demand charge needs to cover 100% of the distribution cost associated with the customer's standby demand. In other words, having multiple standby customers does not allow the utility to avoid distribution demand costs.

The issue is more complicated in the case of transmission demand costs. Arguably, some transmission costs are associated with the provision of generation, and should be "charged" to standby customers in the same manner that generation-related costs are charged to standby customers. Other transmission costs are related to the delivery of power to individual customers, and should be charged to standby customers in the same manner that distribution-related costs are charged to standby customers.

As a general matter, HELCO does not expect to significantly "avoid" transmission costs as a result of serving customers on a standby basis instead of serving them on a full requirements

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<sup>11</sup> Thus, without a separate Standby Demand Charge, standby customers who impose standby kW load on the system but purchase little or no kwh from HELCO, would avoid paying their share of the demand costs that are embedded in the energy rates. HELCO RT-18, page 12. If HELCO's rates were fully cost based, so that the demand charges in Schedules J and P were equal to HELCO's demand costs, the customer charges were equal to the customer costs, and the energy charges were equal to the energy costs, the standby charge issue would not be as critical. HELCO RT-1, page 60.

basis. As a result, HELCO originally proposed to include 100% of transmission costs in the standby demand charge.<sup>12</sup>

TGC, on the other hand, proposed in its filed testimony that 75% of transmission costs be treated as generation-related cost. As was indicated in HELCO RT-18A, there is no basis in the case of HELCO for treating such a large percentage of transmission costs like generation demand costs.

In order to reach a compromise with the Consumer Advocate on the Standby Demand Charge issue, HELCO reduced its proposed Standby Demand Charge. The net impact of this reduction is that only a portion of transmission demand costs are included in the proposed \$11.40 Standby Demand Charge. (In effect, 60% of transmission demand costs are treated like generation demand costs, as shown in Exhibit 2, page 2.)

### 3. Generation Demand Costs

#### Introduction

The objective is to base the generation demand component of the standby demand charge on the generation demand costs incurred by the utility to provide standby service to customers obtaining power from non-utility generation.

In HELCO's case, it has not had significant experience in providing standby service to its customers. Initially, HELCO's standby customers are expected to come from existing customers who install (or arrange for the installation) of on-site generation or cogeneration units. HELCO has already installed the generation facilities necessary to service the total loads of these customers, and will not avoid any of the fixed costs associated with its generation facilities if the customers elect to self-generate all or part of their own load, and purchase standby service from

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<sup>12</sup> This also was consistent with the methodology currently used to evaluate the benefits of Demand-Side management ("DSM") programs in Hawaii, wherein only generation-related costs are deemed

HELCO. Thus, it would not be unfair for HELCO to seek to recover those generation demand costs from the customers on whose behalf they were incurred. HELCO RT-18, page 11. That is why HELCO initially proposed a Standby Demand Charge in its direct testimony based on 100% of the average demand costs (assuming equal class rates of return) for Schedules J/P.

At the same time, customer self-generation could impact the amount of generation that HELCO has to add in the future. The capacity planning issue will become one of determining how much of the standby load HELCO can expect to have to serve at any one time.

The maximum potential peak capacity requirement for standby customers is the sum of their total standby loads. This assumes simultaneous demand requirements for all standby customers, and assumes that their demand requirements are simultaneous with system requirements. HELCO acknowledges that, if there are a number of standby customers receiving power from relatively reliable non-utility power sources, this is an unlikely scenario.

At the opposite end of the spectrum, proponents of low standby charges want to assume that there will be complete diversity among standby customers, and that they will all receive power from highly reliable, non-utility power sources. However, there cannot be complete diversity without a very large population of standby customers. Few if any utilities have a large population of standby customers. Certainly, HELCO does not have or expect to have such a large population of standby customers.

With only a few significant standby customers, HELCO does not expect to be in a position to assume that it will only have to serve a small percentage of the total potential standby load at any one time, such as the 5% that TGC suggested in its testimony. In fact, HELCO

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to be avoided by such programs (even though, conceptually, it can be argued that DSM programs can help avoid transmission costs to some extent).

expects to have to backup more than the 10-20% of the total standby load assumed in certain mainland jurisdictions with many standby customers.

HECO, which has several larger standby customers (such as the two refineries), takes into account a substantial percentage of its standby load in its capacity planning process. For example, HECO includes 17 MW of Tesoro load, which is normally served by Tesoro's cogeneration unit, in its peak forecast. See response to TGC-SIR-404.

### **Theoretical Approaches**

The April 1991 EEI report on standby rates indicated that there are four general conceptual approaches for calculating generation costs associated with providing standby service. According to the report, these methods all attempt to measure costs that the standby customer imposes on the utility system. The following four methods were identified:

- (1) Stochastic Analysis - Determine probabilistically the level of generation required to provide an acceptable level of reliability to standby customers specifically given the individual standby customer unit sizes and outage rates.
- (2) Reserve Rational Approach - Provide utility generation reserves for the standby customer based on the standby customer's peak load multiplied by the utility planning reserve margin. This was the method suggested by HELCO's consultant, John Reed, in HELCO RT-18A, pages 10-12.
- (3) Dispatch Model - Determine the amount of capacity required to maintain the same system-wide loss-of-load-probability, given the individual customers' outage rates and generation sizes.
- (4) Customer-Based Standby Rate Approach - Base the price for standby service on what the customer would pay if the customer provided standby service to itself.

"Standby Rates", pages 13-14, as discussed in HELCO RT-18A, pages 5-6.

There are substantial problems with using any of these conceptual approaches to design HELCO's Standby Demand Charge.

First, as the Commission is aware, HELCO does not use a probabilistic planning criteria (such as loss-of-load-probability, or "LOLP"; loss-of-load-hours, or "LOLH"; or Energy Not Served, or "ENS") to determine when new capacity is needed. Under HELCO's generation capacity planning criteria, new generation is added so that the total reserve ratings of its firm capacity units, less the reserve ratings of units on maintenance, less the reserve rating of its largest available firm capacity unit, will exceed the forecasted system peak load to be served. Reserve requirements are used in determining generation demand costs, since a utility requires reserve capacity (in HELCO's case, at least 20% on average) in order to supply capacity when needed in light of scheduled or forced outages of its system generators. (In other words, HELCO needs approximately 1.2 kW of system capacity to have 1.0 kW available when needed.)

In addition, HELCO is not in a position to estimate the probability of having to serve the standby demand of future standby customers simultaneously. Such an estimate would be speculative at this time, since it would depend on various factors, such as the number of standby demand customers, and the operation and maintenance of their on-site generation, none of which are currently known.

In addition, as indicated in other dockets, such as the IRP docket, HELCO has acquired or made commitments (such as the HEP PPA) for capacity to meet its current and near-term capacity requirements. Future standby loads, for the most part, will come from existing customer loads, for which HELCO has already acquired capacity. Thus, HELCO expects to have the capacity and demand-related facilities to serve all of the standby demand expected under Rider A at the present time and in the reasonably foreseeable future.



As a result, it would not be practical for HELCO to use either the first or the third conceptual approach.

The second approach simply assumes that a percentage of the standby load equal to the utility's reserve margin will be sufficient to serve the standby load. While this method has the virtue of simplicity, it does not necessarily reflect the reality of the situation.

The fourth method, which would price standby service based on the customer's cost of backing up its own self-generation also is impractical -- the utility does not "know" the customer's cost of providing backup service to itself, and such cost would vary considerably from standby customer to standby customer. Moreover, the value to the customer of obtaining backup service from a known source (the utility) with a proven track record and a large customer base would be ignored in such a determining the "cost" to the customer of providing its own backup.

In addition, these conceptual methods may not capture all of the costs of serving standby customers. As is indicated in the EEI study on standby rates, standby customers can cause significant cost uncertainties, which can increase the risk (and, therefore, the cost) of providing service to standby customers. A standby customer generating power for its own needs has no public obligation to do so. If fuel prices change, or new environmental legislation is passed, or some other combination of financial and political events influences production costs for self-generating customers over and above what would be considered to be economic, the customers' use of generating facilities to meet their own needs could be discontinued. The standby customer would then seek to purchase power from the utility. Customer migration to and from full

requirements service can have long-range and potentially high-cost impacts on the cost of providing service to all customers over time.<sup>13</sup>

### EFOR Method

The assumed forced or equivalent forced outage rate (“EFOR”) of the standby customers’ generating facilities is sometimes used as a proxy for the likelihood that standby load will coincide with a utility’s system peak. The standby customer’s contracted standby capacity multiplied by the assumed EFOR is used as a proxy for the expected amount of customer, non-utility capacity that will be out of service at any point in time (and, thus, as a proxy for the amount of customer, non-utility capacity that the utility will have to back up at any point in time). However, it is difficult for utilities to estimate the outage rates for customer-owned generation. Experience indicates that customer-owned generation can have relatively high outage rates if not maintained properly. In any event, most utilities are unwilling to assume that customers’ on-site generation will have extremely high availability factors when planning the amount of capacity the utilities have to install to back up that generation.

In addition, this expected value approach becomes problematic with a small set of customers, because it does not take into account the unit sizes and diversity (or lack thereof) of standby customers.

For example, assume that the utility has four standby customers, each of which has a 200 kW unit, with an outage rate of 10%. Using the EFOR or expected value method to compute the standby capacity needed by the utility results in a determination that the utility only needs 80 kW of standby capacity (200 kW x 4 customers x an expected outage rate of 0.1). However, a customer-owned generating unit will be either operational or not operational. If one customer’s

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<sup>13</sup> See “Standby Rates”, pages 35-36.

200 kW unit is out of service, the utility will need standby capacity of 200 kW, which is significantly greater than the "expected" value of 80 kW.

This problem is exacerbated where the customers have different sizes of customer-owned generating units, with different outage characteristics. In the prior example, if one of the customers had a 1000 kW on-site unit, the utility would have to have 1000 kW of capacity to back up that unit alone, even though the EFOR or expected value method indicates that the standby capacity "needed" by the utility to back up the four customers is only 160 kW  $((200 \text{ kW} \times 3 \text{ customers} \times .01) + (1000 \text{ kW} \times 1 \text{ customer} \times .01))$ .

#### 4. The Stipulated Demand Charge

HELCO and the Consumer Advocate have stipulated to a standard standby demand charge of \$11.40 per kW (before any applicable discounts). HELCO and the Consumer Advocate have agreed on the amount of the standby demand charge -- not necessarily on the conceptual basis for the final result.

HELCO does not agree with the concept that the only generation demand costs that it will incur in providing backup service are equal to a percentage (based on an assumed forced outage rate for the customer's non-utility power source or based on its reserve margin) of its demand costs for full requirements customers. However, for purposes of compromise in this docket, HELCO had indicated to the CA that it was willing to include 20% of generation demand costs, and to treat only 50% transmission demand costs like distribution costs, which would result in a standby demand charge of \$11.80 per kW before discounts, and \$10 per kW after discounts.<sup>14</sup>

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<sup>14</sup> The demand costs referred to are the weighted average demand costs for Schedules J and P (assuming equal class rates of return, and not the higher rates of return actually applicable to Schedules J and P under the existing and proposed rate design).

As a result of the stipulated \$11.40 per kW charge before discounts, HELCO has stipulated to a standby demand charge (before discounts) that effectively (1) includes 100% of its average distribution demand costs for Schedules J and P, (2) treats 40% of the average transmission demand costs for Schedules J and P like distribution demand costs and 60% of such costs like generation demand costs, and (3) includes 20% of the average generation demand costs for Schedules J and P, as shown in Exhibit 2 to this Supporting Statement.

DATED: Honolulu, Hawaii, January 24, 2001.

  
\_\_\_\_\_  
THOMAS W. WILLIAMS, JR.  
PETER Y. KIKUTA

Attorneys for  
HAWAII ELECTRIC LIGHT COMPANY, INC.

Hawaii Electric Light Company, Inc.  
Docket No. 99-0207

Determination of Scheduled Maintenance Energy Rate

		Sch. J (A)	Sch. P (B)	Combined (C = A + B)
L1	Energy Charge Revenues	\$19,260,600 <sup>1</sup>	\$18,306,700 <sup>4</sup>	\$37,567,300
L2	<u>Adjustments</u>	<u>(\$928,800) <sup>2</sup></u>	<u>(\$2,067,400) <sup>5</sup></u>	<u>(\$2,996,200)</u>
L3 = L1- L2	Adjusted Revenues	\$20,189,400	\$20,374,100	\$40,563,500
L4	Sales kWh	242,300,000 <sup>3</sup>	235,500,000 <sup>6</sup>	477,800,000
L5 = L3 ÷ L4 x 100	Cents Per kWh	8.3	8.7	8.5

<sup>1,4</sup> HELCO-RWP-1801, Page 8.

<sup>2,3</sup> HELCO-R-302, Page 3.

<sup>5,6</sup> HELCO-R-302, Page 5.

Hawaii Electric Light Company, Inc.  
Docket No. 99-0207

Stipulated Standby Demand Charge

		Total Costs at Equal Rates of Return <sup>1</sup>			Wtd Avg Cost per kW (d = c + MW)	% of Cost Applied (e)	Derived Standby Rate per kW (f = d x e)
		In \$000s					
		Sch. J (a)	Sch. P (b)	Total (c = a + b)			
L1	Generation Demand	\$14,834.6	\$11,349.4	\$26,184.0	\$20.34	20%	\$4.07
L2	Transmission Demand	\$3,822.4	\$2,912.5	\$6,734.9	\$5.23	---	\$2.72
L3	Distribution Demand	<u>\$3,929.6</u>	<u>\$2,035.4</u>	<u>\$5,965.0</u>	\$4.63	100%	<u>\$4.63</u>
L4 = sum(L1.L3)	Total	<u>\$22,586.6</u>	<u>\$16,297.3</u>	<u>\$38,883.9</u>	\$30.20		<u>\$11.42</u>
Unitizing Factors <sup>2</sup>						rounded	<u>\$11.40</u>
L5	Non-Coincident Sales MW	813.2	473.8	1287.0			

<sup>1</sup> HELCO-RWP-1801, page 8.

<sup>2</sup> HELCO-RWP-1801, page 9.

<sup>3</sup> 60% of Transmission Demand Cost treated as Generation demand cost, and  
40% of Transmission Demand Cost treated as Distribution demand cost  
[(5.23\*.60) \* 20%] + [(5.23 \*.40) \* 100%].

HAWAII ELECTRIC LIGHT COMPANY, INC.  
RIDER A - STANDBY SERVICE  
MONTHLY BILLING EXAMPLE @ Rebuttal Proposed Rates  
Customer's Installed Capacity = 600 kW (3 units x 200 kW)  
Customer's Total Requirement is 1000 kW

Line	CASE	SCHEDULE P - HIGH KWH			
		A	B	C	D
		600 kW standby (Sch. Outage Only)	600 kW standby (Unscheduled Outage)	400 kW standby (Sch. Outage Only)	400 kW standby (Unscheduled Outage)
		P3	P3	P3	P3
L1	Rate Schedule	237000	237000	237000	237000
L2	Total kWh - HELCO supplied	18000	0	18000	0
L3	Scheduled Maintenance kWh	900	900	900	900
L4	Max Total kW Load - current month	1000	1000	1000	1000
L5	Max Total kW Load - previous 11 months	600	600	600	600
L6	Total kW capacity - non-utility power sources	600	600	600	600
L7	Max kW load supplied by non-utility power sources	600	600	600	600
L8	Contract Standby kW	600	600	400	400
L9	Max Standby Service Requirements	600	600	400	600
L10	Outage ?	Yes, Scheduled	Yes, Unscheduled	Yes, Scheduled	Yes, Unscheduled
L11	Excess Standby Demand kW	0	0	0	200
L12	Power Factor	90	90	90	90
L13	Supplemental billing kW	350	350	350	350

### Exhibit 3 Page 1 of 4

Billing: Schedule P3					
Customer Charge	\$375.00	\$375.00	\$375.00	\$375.00	\$375.00
Demand Charge					
First 500 kW \$11.25/kW	\$3,937.50	\$3,937.50	\$3,937.50	\$3,937.50	\$3,937.50
Above 500 kW \$10.75/kW	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Energy Charge					
First 200 kWh/kwb - 15.9844¢/kWh	\$11,189.08	\$11,189.08	\$11,189.08	\$11,189.08	\$11,189.08
Next 200 kWh/kwb - 13.8043¢/kWh	\$9,663.01	\$9,663.01	\$9,663.01	\$9,663.01	\$9,663.01
Over 400 kWh/kwb - 12.8014¢/kWh	\$10,113.11	\$12,417.36	\$10,113.11	\$12,417.36	\$12,417.36
Voltage Discount (5%)	-\$1,745.13	-\$1,860.35	-\$1,745.13	-\$1,860.35	-\$1,860.35
Power Factor Adj	-\$261.77	-\$279.05	-\$261.77	-\$279.05	-\$279.05
Rider A					
Standby kW charge					
at \$11.40 / kw	\$0.00	\$6,840.00	\$0.00	\$4,560.00	\$4,560.00
at \$10.26 / kw	\$6,156.00	\$0.00	\$4,104.00	\$0.00	\$0.00
Sch. Maint. kWh charge					
at 8.5 ¢ / kWh	\$1,530.00	\$0.00	\$1,530.00	\$0.00	\$0.00
Excess Demand charge					
at \$30.00 / kw	\$0.00	\$0.00	\$0.00	\$0.00	\$6,000.00
Voltage Discount (5%)	-\$384.30	-\$342.00	-\$281.70	-\$228.00	-\$528.00
Total Month's Base Bill	\$40,572.49	\$41,940.55	\$38,623.09	\$39,774.55	\$45,474.55

Notes:  
Column A-E : Assumes 75% Load Factor on 600 kW. Customer has 3 - 200 kW units. Outage lasts 5 days, required back-up at 75% load factor.  
Column A-C : Assumes a scheduled maintenance outage.  
Column B,D, E: Assumes an unscheduled maintenance outage.

HAWAII ELECTRIC LIGHT COMPANY, INC.  
RIDER A - STANDBY SERVICE  
MONTHLY BILLING EXAMPLE @ Rebuttal Proposed Rates  
Customer's Installed Capacity = 600 kW (3 units x 200 kW)  
Customer's Total Requirement is 1000 kW

Line	CASE	F	G	H	I	J
	SCHEDULE P - LOW KWH	600 kW standby (Sch. Outage Only)	600 kW standby (Unscheduled Outage)	400 kW standby (Sch. Outage Only)	400 kW standby (Unscheduled Outage)	400 kW standby (Excess Demand)
L1	Rate Schedule	P3	P3	P3	P3	P3
L2	Total kWh - HELCO supplied	18000	18000	18000	18000	18000
L3	Scheduled Maintenance kWh	18000	0	18000	0	0
L4	Max Total kW Load - current month	500	500	500	500	500
L5	Max Total kW Load - previous 11 months	600	600	600	600	600
L6	Total kW capacity - non-utility power sources	600	600	600	600	600
L7	Max kW load supplied by non-utility power sources	600	600	600	600	600
L8	Contract Standby kW	600	600	400	400	400
L9	Max Standby Service Requirements	600	600	400	400	600
L10	Outage ?	Yes, Scheduled	Yes, Unscheduled	Yes, Scheduled	Yes, Unscheduled	Yes, Unscheduled
L11	Excess Standby Demand kW	0	0	0	0	200
L12	Power Factor	90	90	90	90	90
L13	Supplemental billing kW	200	200	200	200	200
Billing: Schedule P3						
Customer Charge						
Demand Charge		\$375.00	\$375.00	\$375.00	\$375.00	\$375.00
First 500 kW - \$11.25/kW		\$2,250.00	\$2,250.00	\$2,250.00	\$2,250.00	\$2,250.00
Above 500 kW - \$10.75/kW		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Energy Charge						
First 200 kWh/kwb - 15.984¢/kWh		\$0.00	\$2,877.19	\$0.00	\$2,877.19	\$2,877.19
Next 200 kWh/kwb - 13.8043¢/kWh		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Over 400 kWh/kwb - 12.8014¢/kWh		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Voltage Discount (5%)		-\$112.50	-\$256.36	-\$112.50	-\$256.36	-\$256.36
Power Factor Adj		-\$16.88	-\$38.45	-\$16.88	-\$38.45	-\$38.45
Rider A						
Standby kW charge						
at \$11.40 / kw		\$0.00	\$6,840.00	\$0.00	\$4,560.00	\$4,560.00
at \$10.26 / kw		\$6,156.00	\$0.00	\$4,104.00	\$0.00	\$0.00
Sch. Maint. kWh charge						
at 8.5 ¢ / kWh		\$1,530.00	\$0.00	\$1,530.00	\$0.00	\$0.00
Excess Demand charge						
at \$30.00 / kw		\$0.00	\$0.00	\$0.00	\$0.00	\$6,000.00
Voltage Discount (5%)		-\$384.30	-\$342.00	-\$281.70	-\$228.00	-\$528.00
Total Month's Base Bill		\$9,797.33	\$11,705.38	\$7,847.93	\$9,539.38	\$15,239.38

Notes:  
Column F-J: Assumes 75% Load Factor on 600 kW. Customer has 3 - 200 kW units. Outage lasts 5 days, required back-up at 75% load factor.  
Column F,H: Assumes a scheduled maintenance outage.  
Column G,I, J: Assumes an unscheduled maintenance outage.



HAWAII ELECTRIC LIGHT COMPANY, INC.  
RIDER A - STANDBY SERVICE  
MONTHLY BILLING EXAMPLE @ Rebuttal Proposed Rates  
Customer's Installed Capacity = 600 kW (3 units x 200 kW)  
Customer's Total Requirement is 1000 kW

SCHEDULE J - HIGH KWH

Line	CASE	K	L	M	N	O
		600 kW standby (Sch. Outage Only)	600 kW standby (Unscheduled Outage)	400 kW standby (Sch. Outage Only)	400 kW standby (Unscheduled Outage)	400 kW standby (Excess Demand)
L1	Rate Schedule	J3	J3	J3	J3	J3
L2	Total kWh - HELCO supplied	237000	237000	237000	237000	237000
L3	Scheduled Maintenance kWh	18000	0	18000	0	0
L4	Max Total kW Load - current month	900	900	900	900	900
L5	Max Total kW Load - previous 11 months	1000	1000	1000	1000	1000
L6	Total kW capacity - non-utility power sources	600	600	600	600	600
L7	Max kW load supplied by non-utility power sources	600	600	600	600	600
L8	Contract Standby kW	600	600	400	400	400
L9	Max Standby Service Requirements	600	600	400	400	600
L10	Outage ?	Yes, Scheduled	Yes, Unscheduled	Yes, Scheduled	Yes, Unscheduled	Yes, Unscheduled
L11	Excess Standby Demand kW	0	0	0	0	200
L12	Power Factor	90	90	90	90	90
L13	Supplemental billing kW	300	300	300	300	300
	Billing: Schedule P3					
	Customer Charge	\$56.00	\$56.00	\$56.00	\$56.00	\$56.00
	Demand Charge	\$2,100.00	\$2,100.00	\$2,100.00	\$2,100.00	\$2,100.00
	Energy Charge					
	First 200 kWh/kwb - 17.2902¢/kWh	\$10,374.12	\$10,374.12	\$10,374.12	\$10,374.12	\$10,374.12
	Next 200 kWh/kwb - 15.0730¢/kWh	\$9,043.80	\$9,043.80	\$9,043.80	\$9,043.80	\$9,043.80
	Over 400 kWh/kwb - 14.0720¢/kWh	\$13,931.28	\$16,464.24	\$13,931.28	\$16,464.24	\$16,464.24
	Voltage Discount (5%)	-\$1,772.46	-\$1,772.46	-\$1,772.46	-\$1,899.11	-\$1,899.11
	Power Factor Adj	-\$177.25	-\$177.25	-\$177.25	-\$189.91	-\$189.91
	Rider A					
	Standby kW charge					
	at \$11.40 / kw	\$0.00	\$6,840.00	\$0.00	\$4,560.00	\$4,560.00
	at \$10.25 / kw	\$6,156.00	\$0.00	\$4,104.00	\$0.00	\$0.00
	Sch. Maint. kWh charge					
	at 8.5 ¢ / kWh	\$1,530.00	\$0.00	\$1,530.00	\$0.00	\$0.00
	Excess Demand charge					
	at \$30.00 / kw	\$0.00	\$0.00	\$0.00	\$0.00	\$6,000.00
	Voltage Discount (5%)	-\$384.30	-\$342.00	-\$281.70	-\$228.00	-\$528.00
	Total Month's Base Bill	\$40,857.19	\$42,447.14	\$38,907.79	\$40,281.14	\$45,981.14

Notes:  
Column K-O : Assumes 75% Load Factor on 600 kW. Customer has 3 - 200 kW units. Outage lasts 5 days, required back-up at 75% load factor.  
Column K,M : Assumes a scheduled maintenance outage.  
Column L,N, O: Assumes an unscheduled maintenance outage.

HAWAII ELECTRIC LIGHT COMPANY, INC.  
RIDER A - STANDBY SERVICE  
MONTHLY BILLING EXAMPLE @ Rebuttal Proposed Rates

Customer's Installed Capacity = 600 kW (3 units x 200 kW)  
Customer's Total Requirement is 1000 kW

Line	CASE	P	Q	R	S	T
	SCHEDULE J - LOW KWH	600 kW standby (Sch. Outage Only)	600 kW standby (Unscheduled Outage)	400 kW standby (Sch. Outage Only)	400 kW standby (Unscheduled Outage)	400 kW standby (Excess Demand)
L1	Rate Schedule	J3	J3	J3	J3	J3
L2	Total kWh - HELCO supplied	18000	18000	18000	18000	18000
L3	Scheduled Maintenance kWh	18000	0	18000	0	0
L4	Max Total kW Load - current month	500	500	500	500	500
L5	Max Total kW Load - previous 11 months	600	600	600	600	600
L6	Total kW capacity - non-utility power sources	600	600	600	600	600
L7	Max kW load supplied by non-utility power sources	600	600	600	600	600
L8	Contract Standby kW	600	600	400	400	400
L9	Max Standby Service Requirements	600	600	400	400	600
L10	Outage ?	Yes, Scheduled	Yes, Unscheduled	Yes, Scheduled	Yes, Unscheduled	Yes, Unscheduled
L11	Excess Standby Demand kW	0	0	0	0	200
L12	Power Factor	90	90	90	90	90
L13	Supplemental billing kW	25	25	25	25	25
Billing, Schedule P3						
Customer Charge		\$56.00	\$56.00	\$56.00	\$56.00	\$56.00
Demand Charge		\$175.00	\$175.00	\$175.00	\$175.00	\$175.00
Energy Charge						
First 200 kWh/kwh - 17.2902¢/kWh		\$0.00	\$864.51	\$0.00	\$864.51	\$864.51
Next 200 kWh/kwh - 15.0730¢/kWh		\$0.00	\$753.65	\$0.00	\$753.65	\$753.65
Over 400 kWh/kwh - 14.0720¢/kWh		\$0.00	\$1,125.76	\$0.00	\$1,125.76	\$1,125.76
Voltage Discount (5%)		-\$8.75	-\$145.95	-\$8.75	-\$145.95	-\$145.95
Power Factor Adj		-\$0.88	-\$14.59	-\$0.88	-\$14.59	-\$14.59
Rider A						
Standby kW charge						
at \$11.40 / kw		\$0.00	\$6,840.00	\$0.00	\$4,560.00	\$4,560.00
at \$10.26 / kw		\$6,156.00	\$0.00	\$4,104.00	\$0.00	\$0.00
Sch. Maint. kWh charge						
at 8.5 ¢ / kWh		\$1,530.00	\$0.00	\$1,530.00	\$0.00	\$0.00
Excess Demand charge						
at \$30.00 / kw		\$0.00	\$0.00	\$0.00	\$0.00	\$6,000.00
Voltage Discount (5%)		-\$384.30	-\$342.00	-\$281.70	-\$228.00	-\$528.00
Total Month's Base Bill		\$7,523.08	\$9,312.38	\$5,573.68	\$7,146.38	\$12,846.38

Notes:  
Column P-T: Assumes 75% Load Factor on 600 kW. Customer has 3 - 200 kW units. Outage lasts 5 days, required back-up at 75% load factor.  
Column P,R: Assumes a scheduled maintenance outage.  
Column Q,S, T: Assumes an unscheduled maintenance outage.

**CERTIFICATE OF SERVICE**

I hereby certify that I have this date served a copy of HELCO'S FINAL  
STANDBY SERVICE RIDER PROPOSAL AND SUPPORTING STATEMENT;  
together with this Certificate of Service, by hand delivery and/or by mailing a copy by  
United States mail, postage prepaid, to the following:

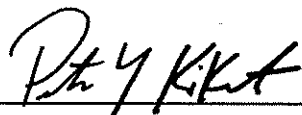
Gregg J. Kinkley, Executive Director  
Department of Commerce and Consumer Affairs  
Division of Consumer Advocacy  
250 South King Street, Room 825  
Honolulu, Hawaii 96813

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841 Bishop Street  
Honolulu, Hawaii 96813

DATED: Honolulu, Hawaii, January 24, 2001.

  
\_\_\_\_\_  
THOMAS W. WILLIAMS, JR.  
PETER Y. KIKUTA

Attorneys for  
HAWAII ELECTRIC LIGHT COMPANY, INC.

EXHIBIT 2  
PAGE 1 OF 15



Warren H. W. Lee, P.E.  
President

January 24, 2001

The Honorable Chairman and Members of the  
Hawaii Public Utilities Commission  
465 South King Street  
Kekuanaoa Building, 1st Floor  
Honolulu, Hawaii 96813

FILED  
2001 JAN 24 P 3:38  
PUBLIC UTILITIES  
COMMISSION

Dear Commissioners:

Subject: Docket No. 99-0207  
HELCO 2000 Test Year Rate Case  
Standby Charge

Attached is the settlement agreement between HELCO and the Consumer Advocate regarding the Standby Charge.

Sincerely,

Attachment

cc: Division of Consumer Advocacy  
Clifford K. Higa, Esq.  
Gail Gilman, The Gas Company  
Alan M. Oshima, Esq.



Warren H. W. Lee, P.E.  
President

January 24, 2001

Mr. Gregg J. Kinkley  
Department of Commerce and  
Consumer Affairs  
Division of Consumer Advocacy  
250 South King Street, 8th Floor  
Honolulu, Hawaii 96813

Dear Mr. Kinkley:

Subject: Docket No. 99-0207  
HELCO Rate Case - 2000 Test Year  
Standby Charge

This letter documents the agreements that HELCO and the Consumer Advocate (the "Parties")<sup>1</sup> have reached regarding the Standby Charge in this proceeding. This agreement is filed in place of HELCO's and the Consumer Advocate's final proposals.<sup>2</sup>

HELCO and The Consumer Advocate agree that the Proposed Rider A provided as Attachment A is reasonable and respectfully request that the Commission adopt the Proposed Rider A. HELCO intends to submit supporting statements, which will provide further details and support for the Proposed Rider A. Highlights of the Proposed Rider A are as follows:

- 1) The standby demand charge will be \$11.40 per kW per month.<sup>3</sup>
- 2) For customers who elect and qualify for Scheduled Maintenance Service, the standby demand charge will be reduced by 10% in months in which the customer's only non-utility power source outages are scheduled.

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<sup>1</sup> The participation of The Gas Company is limited to the Standby Charge issue in this proceeding. HELCO, the Consumer Advocate and The Gas Company exchanged confidential settlement proposals and met on four occasions to discuss the issues, however, The Gas Company was not able to reach agreement with HELCO and the Consumer Advocate.

<sup>2</sup> Pursuant to Order No. 18196 issued in this docket, HELCO, the Consumer Advocate and The Gas Company were to file their final proposals and supporting statements by January 19, 2001. In the event the parties and the participant reached an agreement, a stipulation was to be filed instead. Pursuant to Order No. 18326, the January 19, 2001 due date was extended to January 24, 2001.


<sup>3</sup> This standby demand charge rate is a negotiated compromise, and should not be deemed as an agreement by the parties as to the method for determining the standby demand charge rate in the future.

Mr. Gregg Kinkley  
January 24, 2001  
Page 2


- 3) A Supply Voltage Adjustment of 5% for standby customers who take service at the primary distribution level (which is the same adjustment found in Schedule J and Schedule P) would also apply to the Standby Demand Charge (after application of the Scheduled Maintenance Service Standby Demand Charge Discount, if any), the Excess Standby Demand Charge, and the Scheduled Maintenance Service Energy Charge.
- 4) Rider A would allow a customer with at least three non-utility power sources, with each such source separately metered, to elect to limit its Contract Standby kW to the sum of the capacities of its two largest power sources.<sup>4</sup>
- 5) A lower energy charge (rather than that in Schedule J or Schedule P), for Scheduled Maintenance Service will apply to the kWh used by the customer as a result of scheduled maintenance of the customer's non-utility power source(s) during the Scheduled Maintenance Period(s) when the customer's non-utility power source(s) is actually down for maintenance.

The parties are mindful that the Commission is not bound by any agreement reached between the parties and that the Commission may reject the agreement in full or in part.

Sincerely,



Agreed:

 1/24/01  
\_\_\_\_\_  
Gregg J. Kinkley (date)  
Executive Director  
Division of Consumer Advocacy

Attachments

cc: Hawaii Public Utilities Commission  
G. Gilman (The Gas Company)  
A. M. Oshima, Esq.

<sup>4</sup> As far as HELCO is aware, this type of provision has not been used by other utilities, and adds significant complexity to the Standby Rider (but is beneficial to certain standby customers).



1 SETTLEMENT 01/22/01

SHEET NO. 70

Effective \_\_\_\_\_

2  
3  
4 RIDER A  
5 STANDBY SERVICE  
6  
7

8 APPLICABILITY:  
9

10 Applicable to standby service to customers with alternate  
11 regular source(s) of electric power other than the Company (non-  
12 utility power source(s)). Service under this Rider shall be at  
13 least 25 kW, supplied and metered at a single voltage and delivery  
14 point as specified by the Company.  
15

16 Standby service is the power service that the Company is  
17 obligated to stand ready to supply when the customer's non-utility  
18 power source(s) is unavailable for service. Standby service refers  
19 to Scheduled Maintenance Service or Backup Service, or both.  
20

21 Scheduled Maintenance Service is the standby service supplied  
22 by the Company during the Scheduled Maintenance Period(s) for the  
23 customer's non-utility power source(s) as specified in the Standby  
24 Service Contract.  
25

26 Backup Service is the standby service supplied by the Company  
27 when the customer's non-utility power source(s) is unavailable due  
28 to unscheduled outages.  
29

30 Supplemental Service is the power service supplied by the  
31 Company in addition to the customer's electric power requirements  
32 normally obtained from its non-utility power source(s). The Company  
33 will serve the customer's supplemental service under Schedule J or  
34 Schedule P, whichever is applicable.  
35

36  
37  
38 DETERMINATION OF DEMAND:  
39

40 Standby Demand:  
41

42 The Standby Billing kW for each month shall be the customer's  
43 Contract Standby kW as specified in the Standby Service Contract.

HAWAII ELECTRIC LIGHT COMPANY, INC.

Docket No. 99-0207, D&O No. \_\_\_\_\_.



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RIDER A. - Continued

Supplemental Demand:

The Demand Charge of the applicable rate schedule shall apply to the customer's Supplemental Billing kW.

For Schedule J customers, the Supplemental Billing kW for each month shall be the difference between the Total kW Load for such month, or 75% of the highest Total kW Load for the previous eleven months, whichever is higher, less the Standby Billing kW, but not less than 25 kW.

For Schedule P customers, the Supplemental Billing kW for each month shall be the difference between the Total kW Load for such month, or the mean of the current month's Total kW Load and highest Total kW Load for the previous eleven months, whichever is higher, less the Standby Billing kW, but not less than 200 kW.

If the customer qualifies to elect and does elect to limit its Contract Standby kW to the sum of the capacities of its two largest non-utility power sources, then the customer's Supplemental Billing kW shall be determined by subtracting (instead of subtracting the Standby Billing kW) the lesser of:

- (a) the Total Capacity of the customer's non-utility power sources, normally connected and operating in parallel with the Company's system, or
- (b) the maximum measured kW load supplied by such non-utility power sources.

The customer's Total kW Load for each month shall be the maximum time-coincident sum of the measured kW load supplied by the Company and the measured kW load supplied by the customer's non-utility power source(s). The maximum time-coincident measured kW load for each month shall be the maximum time-coincident average load in kW during any fifteen minute period.

RATES:

The rates, terms, and conditions of Schedule J or Schedule P, whichever is applicable, shall apply except that the following Standby Demand Charge, Scheduled Maintenance Service Energy Charge, and Excess Standby Demand Charge shall be added to the customer's bill, and the Minimum Charge and Determination of Demand provisions of this Rider shall supersede the Minimum Charge and Determination of Demand provisions in the applicable standard rate schedule:

HAWAII ELECTRIC LIGHT COMPANY, INC.

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RIDER A - Continued

Standby Demand Charge:

All kW of standby billing demand (Standby Billing kW)-per kW \$11.40

Scheduled Maintenance Service Standby Demand Charge Discount

The Standby Demand Charge will be reduced by 10% for customers who elect and qualify for Scheduled Maintenance Service, provided that such reduction in the Standby Demand Charge shall only apply in each month in which the customer's non-utility power source(s) had no outages or partial outages other than scheduled outages during Scheduled Maintenance Periods. A "partial" outage would occur when a customer's non-utility power source was operated at a capacity of 70% or lower than its nameplate rating (during a period when the customer was receiving supplemental energy from the Company).

Scheduled Maintenance Service Energy Charge:

All maintenance kWh during Scheduled Maintenance Period 8.5000 ¢/kWh

The energy charge for scheduled maintenance service shall apply to the kWh used by the customer as a result of the scheduled maintenance of the customer's non-utility power source(s) during the Scheduled Maintenance Period(s) when the customer's non-utility power source(s) is actually down for maintenance. Such kWh will be based on the lesser of:

- (a) the Scheduled Maintenance kW load specified in the Standby Service Contract for the customer's non-utility power source(s) that is actually down for scheduled maintenance, multiplied by the number of hours when such non-utility power source(s) is down for maintenance as indicated by the meter on such source(s), or
- (b) the measured kWh supplied by the Company during the Scheduled Maintenance Period when the customer's non-utility power source(s) is actually down for maintenance.

Backup Service Energy Charge:

The charge for energy taken under Backup Service shall be the energy rates applicable for supplemental service, which are the energy rates under Schedule J or Schedule P.

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RIDER A - Continued

Excess Standby Demand Charge:

A customer with at least three non-utility power sources, with each such source separately metered, may elect to limit its Contract Standby kW to the sum of the capacity of its two largest power sources, subject to the Terms and Conditions of this Rider. If a customer makes this election and its standby service requirements during a month exceed its Contract Standby kW, then the excess standby service demand (i.e., the difference between the customer's maximum Standby Service Requirement and the Contract Standby kW) shall be billed at the following Excess Standby Demand Charge.

Excess Standby Demand Charge - per Excess Standby kW           \$30.00

The customer's standby service requirement for each fifteen minute period shall be the lesser of:

- (a) the Total Capacity of the customer's non-utility power source(s) connected and operating in parallel with the Company's system less the measured kW supplied by such sources during each fifteen minute period, or
- (b) the measured kW supplied by the Company during the same fifteen minute period plus the Standby Contract kW.

The Customer's Excess Standby kW for the month shall be the difference between the customer's maximum Standby Service Requirement for any fifteen minute period during the month, less the customer's Contract Standby kW.

The Excess Standby kW will be added to the customer's Contract Standby kW to reset a new Contract Standby kW in each succeeding billing month.

Supply Voltage Adjustment:

The Supply Voltage Adjustment in the applicable standard rate schedule shall apply to the Standby Demand Charge (after application of the Scheduled Maintenance Service Standby Demand Charge Discount, if any), the Excess Standby Demand Charge, and the Scheduled Maintenance Service Energy Charge.

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RIDER A - Continued

MINIMUM CHARGE:

The monthly minimum charge shall be the sum of the Minimum Charge under the applicable rate schedule, the Standby Demand Charge and Excess Standby Demand Charge. Where the Company determines that the installed capacity of the customer's non-utility power source(s) exceeds the customer's total kW requirement as determined by the Company, the monthly minimum charge shall be the sum of the Customer Charge under the applicable rate schedule, the Standby Demand Charge, and the Excess Standby Demand Charge.

For Schedule J customers, the kW used in the Minimum Charge calculation shall be the Total kW Load for the month, or the greatest Total kW Load for the preceding eleven months, whichever is higher, less the Standby Billing kW, but not less than 25 kW.

For Schedule P customers, the kW used in the Minimum Charge calculation shall be the Total kW Load for the month, or the greatest Total kW Load for the preceding eleven months, whichever is higher, less the Standby Billing kW, but not less than 200 kW.

If the customer qualifies to elect and does elect to limit its Contract Standby kW to the sum of the capacities of its two largest non-utility power sources, then the kW used in the Minimum Charge calculation shall be determined by subtracting (instead of subtracting the Standby Billing kW) the lesser of:

- (a) the Total Capacity of the customer's non-utility power sources, normally connected and operating in parallel with the Company's system, or
- (b) the maximum measured kW load supplied by such non-utility power sources.

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RIDER A - Continued

TERMS AND CONDITIONS:

1. This Rider shall apply when a customer regularly obtains power service from a source(s) other than the Company, and obtains supplemental service from the Company when its non-utility power source(s) capability is less than its total power requirements; and/or requires standby service from the Company.
2. This Rider shall not apply when a customer's non-utility power source(s) is used exclusively for emergency service in case of failure of the normal supply of power service from the Company, or to a customer that has an Agreement with the Company which provides for the sale of electric energy and/or capacity to the Company that was approved by the Commission prior to October 25, 1999, or to a customer whose non-utility power is produced from a non-fossil energy source.
3. The connection and operation of the customer's non-utility power source(s) in parallel with the Company's system will be permitted when the customer is served under this Rider, and in accordance with the terms of a contract with the Company for parallel interconnection.
4. Customers receiving service under this Rider shall sign a Standby Service Contract with the Company, which shall specify the Contract Standby kW for standby service required from the Company, and the Scheduled Maintenance Service, if any, elected by the customer.
5. The Contract Standby kW initially will be based on the Total Capacity of the customer's non-utility power source(s) (except as provided below), or will be jointly determined by the Company and the customer.

The Total Capacity of the customer's non-utility power source(s) will be determined by, but not limited to, such indicators as the nameplate rating(s) of the generating unit(s), and the design specifications and operating characteristics of the generating unit(s).

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RIDER A - Continued

TERMS AND CONDITIONS - Continued

The Contract Standby kW, when jointly determined by the Company and the customer, must be determined by the Company to be reasonable given the Total Capacity of the customer's non-utility power sources, which are connected and operated in parallel with the Company's system, the extent to which the capacity of the customer's service connection is limited, and such other information as the Company considers pertinent to the determination of the appropriate Contract Standby kW requirements of the customer.

The Contract Standby kW normally will not be less than the lesser of (a) the Total Capacity of the customer's non-utility power source(s) (except as provided below), or (b) the greatest Total kW Load for the twelve months preceding commencement of service under this rider, or execution of the Standby Service Contract, whichever is earlier.

In the event that the maximum measured kW load supplied by the customer's non-utility power source(s) exceeds the Contract Standby kW (except as provided below), then the Contract Standby kW shall be automatically adjusted to an amount equal to the maximum measured kW load beginning with the month in which the maximum measured kW load occurred. Each such automatically adjusted Contract Standby kW shall be in effect thereafter for such customer, unless superceded by another automatically adjusted Contract Standby kW.

A customer with at least three non-utility power sources, with each such source separately metered, may elect to limit its Contract Standby kW to the sum of the capacities of its two largest non-utility power sources. If such a customer incurs Excess Standby kW, such Excess Standby kW will be added to the customer's Contract Standby kW to reset a new Contract Standby kW in each succeeding billing month.

A customer electing to limit its Contract Standby kW to the sum of the capacities of its two largest power sources shall also elect Scheduled Maintenance Service for its non-utility power sources, and shall take scheduled maintenance for only one of its non-utility power sources at a time.

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RIDER A - Continued

TERMS AND CONDITIONS - Continued

6. The customer must notify the Company of any changes in its non-utility power source(s) that may affect its Contract Standby kW specified in the Standby Service Contract. The Company may, from time to time, verify the customer's Contract Standby kW specified in the Standby Service Contract. Where the Company determines that the Contract Standby kW requires adjustment, the Company shall inform the customer in writing 60 days before such change becomes effective.
7. The maximum instantaneous demand may be limited by contract. When the capacity of the service connection is limited to conform with the Contract Standby kW, the customer shall provide, install and maintain at its expense, and the Company shall control, any circuit breaker and other equipment necessary to limit the service connection to the Contract Standby kW.
8. The Company shall not be liable for any consequential damages caused by, or resulting from any limitation of kW capacity supplied to the customer under this Rider.
9. Scheduled Maintenance Service under this rate Schedule shall be for power service during the Scheduled Maintenance Period of the customer's non-utility power source(s). A customer electing to take Scheduled Maintenance Service shall specify in the Standby Service Contract whether it is taking Standard Scheduled Maintenance Service, or Off-peak Scheduled Maintenance Service (if it is eligible for such option).

For Standard Scheduled Maintenance Service, maintenance for a customer's non-utility power source must be scheduled no more than two times per year, for a total period not to exceed three weeks, and is subject to the following terms and conditions:

- a. The Scheduled Maintenance Periods shall not exceed a total of 3 weeks per non-utility power source within a calendar year. A non-utility power source cannot be down for maintenance more than 2 times during the calendar year.

HAWAII ELECTRIC LIGHT COMPANY, INC.

SHEET NO. 70H  
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RIDER A - Continued

TERMS AND CONDITIONS - Continued

b. The customer shall specify its initial Scheduled Maintenance Periods (to be taken during the first calendar year or partial calendar year in which it takes Standard Scheduled Maintenance Service), subject to review and approval by the Company, in the Standby Service Contract. Prior to July 1 of each year, the customer shall submit in writing to the Company any changes to the Scheduled Maintenance Periods for the following calendar year. Where the Company indicates within 60 days that any such changes are not acceptable to the Company based on operating, technical or other similar reasons, the Company and the customer will work together to determine the changes to the Scheduled Maintenance Periods that are reasonable and acceptable to both parties.

c. Either HELCO or the customer may request one change in the start date and/or duration of any scheduled outage by written request (specifying the reason for such request, and the proposed start date and/or duration of the scheduled outage) made at least thirty days before the scheduled start of such outage. HELCO and the customer will make reasonable efforts to accommodate such requests (by written responses given within one week of receiving such requests).

A customer with one or more non-utility power source(s) with capabilities of less than or equal to 500 kW, may elect Off-peak Scheduled Maintenance Service where the Scheduled Maintenance Periods occur only during the Company's off-peak period, subject to the following conditions:

a. A power source (or power sources up to a maximum capability of 500 kW) can be maintained during off-peak hours with one-week prior notice to HELCO. Notice can be given either by phone, fax, or e-mail, and must include the meter number for the power source(s) to be maintained and the expected additional kW demand to be provided by the Company during the Scheduled Maintenance Service period(s). Off-peak hours are 9 p.m. - 7 a.m., daily.

HAWAII ELECTRIC LIGHT COMPANY, INC.



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RIDER A - Continued

TERMS AND CONDITIONS - Continued

- b. Maintenance on the same power source can be scheduled no more than twice within a four-week period. The customer must call the Company in advance of shutting off and/or starting up its power source that will be maintained under this provision.
  - c. The Standby Service Contract must specify the non-utility power source(s) and meter numbers of the sources to be maintained during off-peak hours under the above terms. Such power sources are not eligible for Standard Scheduled Maintenance Service.
10. The customer's non-utility power source(s) shall be metered, unless the Company deems such metering to be impractical for engineering or operating reasons. If the customer's non-utility power source(s) cannot be metered by the Company, then the customer's Total kW Load for each month shall be the sum of the maximum measured kW load supplied by the Company and the Contract Standby kW, and the customer shall not be eligible for Scheduled Maintenance Service. If the customer has more than one non-utility power source, and elects scheduled maintenance service for only one of its non-utility power sources at a time, then each of the customer's non-utility power sources shall be separately metered.
  11. The Company shall install, own, operate, maintain, and read meters on the customers non-utility power source(s) for billing purposes. The customer shall be responsible for any cost associated with metering its non-utility power source(s), including the total installed cost of the meters. All meters shall be installed at some convenient place approved by the Company upon the customer's premises, and shall be so placed as to be accessible at all times for inspection, reading, and testing.

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Effective \_\_\_\_\_

RIDER A - Continued

TERMS AND CONDITIONS - Continued

When the Company performs maintenance work on the meters on the customer's non-utility power source(s), the Company shall bill the customer for the total cost associated with such maintenance including labor and material costs, and shall add this amount to the customer's electric bill for the period. The Company shall provide the customer with the breakdown of such maintenance costs such as the labor cost, materials and supplies, taxes, and any other cost incurred.

The customer shall, at its expense, furnish, install and maintain in accordance with the Company's requirements all associated equipment such as all conductors, service switches, fuses, meter sockets, meter and instrument transformer housing and mountings, switchboard meter test buses, meter panels, and similar devices, required for service connection and meter installations on customer's premises.

The customer shall at its expense, provide a dedicated telephone line to connect the meter(s) to the Company's communication system.

The meter(s) shall be ratcheted to prevent reversal or reverse registration.

12. The term of contract under this Rider is at least one (1) year, and the contract shall remain in effect from month-to-month thereafter, unless terminated by either party upon thirty (30) days prior written notice to the other party.

13. Service supplied under this Rider shall be subject to the Rules and Regulations of the Company.

SHEET NO. 70K  
Effective \_\_\_\_\_

RIDER A CONTRACT FORM  
Standby Service

This Contract covers Standby Service provided by HAWAII ELECTRIC LIGHT COMPANY, INC. (HELCO) to:

Customer: \_\_\_\_\_ Account Number: \_\_\_\_\_  
Service Address: \_\_\_\_\_

Under this Contract, the electric service provided by HELCO to the customer's service location shall be served on rate Schedule \_\_\_\_\_ and Rider A. All terms of Schedule \_\_\_\_\_ shall apply, except as further specified in Rider A and in this Contract.

The standby service under Rider A shall be: (check one)  
\_\_\_\_\_ Backup Service \_\_\_\_\_ Scheduled Maintenance Service

If customer elects Scheduled Maintenance Service: (check one)  
\_\_\_\_\_ Standard Scheduled Maintenance Service  
\_\_\_\_\_ Off-peak Scheduled Maintenance Service

Contract Standby kW \_\_\_\_\_ (1)  
Installed kW Capacity of Each Non-Utility Power Source \_\_\_\_\_ (2)  
Total Number of Non-Utility Power Sources \_\_\_\_\_ (3)  
Scheduled Maintenance Periods & Non-Utility Power Sources to be maintained: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

This Contract shall become effective at the beginning of the first regular billing cycle following \_\_\_\_\_ (date) or the first billing period after the installation of the required meters for service under Schedule \_\_\_\_\_ and Rider A, whichever occurs later.

The parallel interconnection of the customer's non-utility power sources with the Company's system shall be permitted in accordance with the terms and conditions specified in a contract for parallel interconnection.

Term of Contract shall be at least one year, and shall continue thereafter month-to-month until terminated by either party upon thirty (30) days prior written notice to the other party. This Contract may be terminated at any time by mutual agreement of the Company and the customer.

Authorized Customer Signature:	HELCO Representative:
_____ _____ Name                    Date	_____ _____ Name                    Date
_____ Title	_____ Title
_____ Company	

HAWAII ELECTRIC LIGHT COMPANY, INC.

Docket No. 99-0207, D&O No. \_\_\_\_\_.